

CLAIMS

1. An oven or grill burner, composed of two half shells, one whereof is perforated, which are tightly joined together along at least a portion of their edges, so as to form a tubular body communicating with a venturi tube, in which fuel gas and combustion air are mixed, characterized in that at least two corresponding ends of the two half shells have a truncated profile, so that said tubular body has at least one truncated end.

2. A burner as claimed in claim 1, characterized in that, when the burner is fitted onto the bottom or top wall of the oven, the junction plane between the two half shells is substantially parallel both to the bottom and/or the top of the oven.

3. A burner as claimed in claim 1 or 2, characterized in that said truncated end of the tubular body corresponds with the tubular body closing head.

4. A burner as claimed in one or more of the preceding claims, characterized in that a flame arc forming head is provided at the tubular body end opposite to the truncated end.

5. A burner as claimed in claim 4, characterized in that the ends of the two half shells opposite to the truncated ends are made of one piece with each of the two half shells so that, when the two half shells are joined together, they automatically form a flame arc forming head.

6. A burner as claimed in one or more of the preceding claims, characterized in that the outer

faces of the two half shells are substantially flat and, in the coupled condition, are substantially parallel, so that the tubular member has a substantially flat shape.

7. A burner as claimed in one or more of the preceding claims, characterized in that, at the truncated end of the tubular body, the truncated ends of the two half shells are pressed against each other, to seal said end.

8. A burner as claimed in one or more of the preceding claims, characterized in that at least one of the two truncated ends of the two half shells, but preferably both truncated ends of the two half shells, pressed against each other, extend beyond the closing area and are deformed in such a manner as to form a base to allow the burner to be fastened to the bottom or top wall of the oven.

9. A burner as claimed in one or more of the preceding claims, characterized in that it includes a venturi tube for supplying the air/gas mixture, which is fitted in an offline position with respect to the longitudinal axis of the burner body or to the mixture propagation axis.

10. A burner as claimed in one or more of the preceding claims, characterized in that an opening, particularly having a circular shape, is provided on the outer face of one of the two half shells, at the flame arc forming head end, an end of the venturi tube being sealed thereto, said end having an air/gas supply opening, whose median longitudinal axis is in a

staggered position with respect to the median longitudinal axis of the tubular body.

11. A burner as claimed in one or more of the preceding claims, characterized in that the median longitudinal axis of the venturi tube is coplanar to the median longitudinal axis of the tubular body with respect to a plane perpendicular to the separator/junction plane between the two half shells, or the two axes are oriented transverse to each other, so that the venturi tube is oriented transverse to the tubular body.

12. A burner as claimed in one or more of the preceding claims, characterized in that one or more gas/air mixture conveying walls are provided, to ensure an even distribution of said mixture inside the burner and to the outlet holes.

13. A burner as claimed in one or more of the preceding claims, characterized in that each of said inner walls consists of a recess or inner profile, obtained by squeezing deformation and by the formation of a groove or throat on the outer faces of at least one of the half shells.

14. A burner as claimed in one or more of the preceding claims, characterized in that each of the two half shells has a continuous U- or V-shaped groove at the peripheral edge of the outer face, which corresponds to a continuous U- or V-shaped inner recess, whose arched section covers the flame arc forming head area.

15. A burner as claimed in one or more of the

preceding claims, characterized in that the stems of each U- or V-shaped recess end at a predetermined distance from the truncated end of the tubular body.

16. A burner as claimed in one or more of the preceding claims, characterized in that said two U- or V-shaped inner recesses have such a size or are arranged in such a manner as to form a slot for transversely conveyng the air and gas mixture along at least a portion of their longitudinal extension.

17. A burner as claimed in one or more of the preceding claims, characterized in that the sum of the height extensions of said two U- or V-shaped inner recesses is smaller than the distance between the two inner faces of the two half shells.

18. A burner as claimed in one or more of the preceding claims, characterized in that said two U- or V-shaped inner recesses extend at least partly in staggered positions, in such a manner as to form a continuous slot for conveying the air and gas mixture in a direction transverse to the flow direction.

19. A burner as claimed in one or more of the preceding claims, characterized in that the U- or V-shaped recesses have one or more mutual contact portions along their longitudinal ends.

20. A burner as claimed in claim 19, characterized in that, in the mutual contact portions of the U- or V- shaped facing recesses, the two half shells are further joined together by mechanical means, e.g. by crimping and/or fastening or by fastening or by welding.

21. A burner as claimed in claim 19 or 20, characterized in that the mutual contact portions of the facing half shell inner recesses along each lateral longitudinal wall are disposed symmetrically with respect to the center median longitudinal axis.

22. A burner as claimed in one or more of the preceding claims 12 to 21, characterized in that the end crest or strip of at least one of the inner facing recesses has a corrugated shape, to generate widened portions of the conveying slot and/or transverse passage channels between the central chamber, delimited by the inner longitudinal recesses on the opposite longitudinal sides of the burner and the lateral longitudinal compartments delimited on one side by the corresponding pair of inner facing recesses and on the other side by the associated lateral longitudinal wall of the burner.

23. A burner as claimed in claim 22, characterized in that both inner facing recesses are shaped with a corrugated end crest or strip, said two corrugated profiles being symmetric to each other with respect to the separator plane between said two inner facing recesses.

24. A burner as claimed in claim 22 or 23, characterized in that the inner facing recesses are also spaced at the apices of their corrugated profiles.

25. A burner as claimed in claim 22 or 23, characterized in that the inner facing recesses are in contact with each other for at least a portion of their apices and at all apices of the corrugated profiles.

26. A burner as claimed in one or more of the preceding claims 22 to 25, characterized in that the transverse passage channels generated by the corrugated profile of the crests or end portions of the inner facing recesses have an inclined orientation with respect to a direction perpendicular to the axis of the burner and/or the inner recesses.

27. A burner as claimed in claim 26 characterized in that the transverse channels are parallel to each other.

28. A burner as claimed in claim 26 or 27, characterized in that the transverse channels are equally spaced, at least in groups.

29. A burner as claimed in one or more of claims 26 to 28, characterized in that the transverse channels are oriented in a direction diverging from the median area of the burner toward the corresponding side wall in the gas flow direction inside the burner.

30. A burner as claimed in one or more of claims 26 to 29, characterized in that the transverse channels, formed in the two inner facing recesses, each formed along one of the lateral longitudinal walls of the burner, are oriented and arranged symmetrically with respect to a median longitudinal plane of the burner, which plane is perpendicular to the axis of said transverse channels.

31. A burner as claimed in one or more of claims 1 to 30, characterized in that the intermediate section between the two pairs of inner facing recesses of at least one of the two half shells has an arched,

particularly cylindrical shape, with an axis substantially parallel to or coincident with the burner axis.

32. A burner as claimed in claim 31, characterized in that the intermediate section between the two inner lateral recesses of each of the two half shells has an arched or cylindrical shape.

33. A burner as claimed in claim 32, characterized in that the intermediate sections between the two inner recesses of the two half shells are symmetrical to each other with respect to the separator plane between the two half shells.

34. A burner as claimed in one or more of the preceding claims 31 to 33, characterized in that the arched median section of the half shells extends from the venturi tube to the opposite end of the inner recesses and at a certain distance from the burner end opposite to the gas and air mixture inlet end, the two half shells being flat or substantially flat in said end section.

35. A burner as claimed in one or more of the preceding claims, characterized in that the outer face of the half shell that does not carry the venturi tube has at least two bolts for centering and/or fastening a parabolic reflector, which has a pair of corresponding holes, which bolts extend perpendicular to said face.

36. A burner as claimed in one or more of the preceding claims, characterized in that one, but preferably both of said two bolts are threaded and that the parabolic reflector is secured thereon by

tightening a threaded nut on each of said bolts in corresponding manners, or that one but preferably both bolts have an unthreaded outer shell, and the parabolic reflector is secured by force fitting thereon an elastic ring, or the like.

37. A burner as claimed in claims 31 to 36, characterized in that the parabola has a median strip in contact with the median arched portion of the associated half shell, which strip forms an arc substantially corresponding to said median arched portion of the half shell.

38. A burner as claimed in one or more of the preceding claims, characterized in that it includes a pilot burner that is made of one piece with the burner body.

39. A burner as claimed in one or more of the preceding claims, characterized in that the pilot burner is obtained by bending peripheral half shell coupling flanges, that are riveted or drawn, particularly in the direction of the parabolic reflector carrying half shell, so as to form a channel, whose outer side wall is opposite to the side wall of one of the two half shells, particularly the parabolic reflector carrying half shell, and at least partly at a predetermined distance therefrom, which side wall of said half shell has at least one row of aligned holes, to supply the gas/air mixture to the pilot burner.

40. A burner as claimed in one or more of the preceding claims, characterized in that said pilot burner has a substantially U-or V-shaped extension,

whose arched portion extends along the flame arc forming head and whose stems end substantially at the truncated end of the tubular body.

41. A burner as claimed in one or more of the preceding claims, characterized in that it has a substantially transverse ignition duct, which is oriented toward the accessible burner side, with respect to the mounted condition, which opens, at one end, in front of the gas/air mixture supplying holes, and in which a part of said mixture is conveyed for manual ignition.

42. A burner as claimed in one or more of the preceding claims, characterized in that the parabolic reflector has, in the end section of one of the two stems of the pilot burner, a spout-like extension which forms the burner ignition tube.

43. A burner as claimed in one or more of the preceding claims, characterized in that the parabolic reflector has, in the end section of one of the two stems of the pilot burner, a slot-like aperture which is obtained by breaking the material of the parabolic reflector and bending the edges of the slot toward the pilot, in such a manner as to form the burner ignition tube.

44. A burner as claimed in one or more of the preceding claims, characterized in that the truncated end of the tubular body has a separate closing member, particularly a member obtained by die-casting or bending and molding a sheet metal blank.

45. A burner as claimed in claim 44,

characterized in that said separate closing member is also the flame arc forming head of the burner.

46. A burner as claimed in claim 45, characterized in that the two half shells are extended on the end opposite to the truncated end, by an aligned venturi tube.

47. A burner as claimed in claim 46, characterized in that the two half shells are extended on the end opposite to the truncated end, by a pair of additional half shells which form, when joined together, the venturi tube.

48. A burner as claimed in claim 46 or 47, characterized in that said venturi tube extends by its axis in a direction parallel, particularly coincident, or transverse to the longitudinal axis of the burner body.

49. A burner as claimed in one or more of the preceding claims, characterized in that the truncated end of one of the two half shells extends beyond the other one and has a deformation whose shape forms a base to allow the burner to be fastened to the bottom or top wall of the oven.

50. A burner as claimed in one or more of the preceding claims, characterized in that the closing flame arc forming head has the shape of a half-shell and is force fitted inside the tubular body of the burner up to abutment of the end edge of the shorter half shell against an end-of-stroke abutment provided on the outer surface of the flame arc forming head which rests, in the inserted position, on the extension

of the other half shell.

51. A burner as claimed in one or more of the preceding claims, characterized in that it comprises means for locking the flame arc forming head in the inserted condition.

52. A burner as claimed in claim 51, characterized in that said means consist of at least one, but preferably at least two inner ridges, particularly circular bosses, which are provided in the proximity of the shorter half shell end, and are engaged in a pair of corresponding slots or holes provided on the facing surface of the part of the flame arc forming head inside the burner.

53. A burner as claimed in one or more of the preceding claims, characterized in that the flame arc forming head has the shape of a half shell and the two slots of the flame arc forming head extend in a direction perpendicular to the longer half shell, by a pair of tubular bushes respectively, having such an axial length that the openings at their free ends are in contact with the inner surface thereof, and are engaged with a pair of corresponding inner bosses provided inside the longer half shell.

54. A burner as claimed in one or more of the preceding claims, characterized in that the extended section of the longer half shell has at least one pair of apertures which form a pair of tabs to be bent and compressed above an outer peripheral flange of the flame arc forming head, particularly having a semicircular shape, which has the function to further

secure it and to prevent removal thereof.

55. A burner as claimed in one or more of the preceding claims, characterized in that the pilot burner forms a particularly semicircular channel in the flame arc forming head area, the inner wall whereof has at least one row of holes communicating with the inner chamber of the flame arc forming head for supplying the gas/air mixture, the lateral segments of the pilot burner, integral with the burner, being connected to the ends of said channel

56. A burner as claimed in one or more of the preceding claims, characterized in that it has a squared, preferably rectangular shape, and has a transverse end channel which is delimited on one side by a transverse wall which is seamlessly connected to an ignition spout, or tube, and on the other side by a plate-like part, that is oriented parallel to the burner faces, and has one or more through holes, formed in its thickness, for supplying gas in the transverse channel, which holes extend from the end edge of the plate, opposite to the transverse channel, to the transverse channel itself, and open into them.

57. A burner as claimed in claim 56, characterized in that the burner end associated to the flame arc forming head is shaped in such a manner as to form a slot for insertion of the plate-like part, whose size substantially corresponds to the section of said plate-like part.

58. A burner as claimed in claims 56 and 57, characterized in that the flame arc forming head has

side flanks that protrude on the same side of the plate-like part as the transverse end wall, whereas the burner end fastened to the flame arc forming head has side recesses for insertion of the side flanks of the flame arc forming head.

59. A burner as claimed in one or more of the preceding claims 56 to 58, characterized in that, at the edge that delimits the transverse channel, the plate-like part has a tab that overlaps the end edge of the associated part of the burner wall, and that these tabs form a pocket for receiving said edge of the burner wall and an end-of-stroke abutment for the inserted flame arc forming head in the corresponding burner end.

60. A burner as claimed in the preceding claims 56 to 59, characterized in that, on one surface, preferably on the surface turned toward the ignition tube, the plate-like part has a central continuous groove which opens into the transverse groove of the flame arc forming head and that, in the mounted condition, forms another channel with the corresponding burner wall, for supplying gas to the ignition tube, which groove is closer to the end of the ignition tube, than the through holes for supplying gas to the transverse channel of the flame arc forming head.

61. A burner as claimed in one or more of the preceding claims 56 to 60, characterized in that the side flanks have, in a median area of their extension, a longitudinal groove which starts from the end opposite to the transverse end channel, and ends at a

certain distance from the end having said transverse channel.

62. A burner as claimed in one or more of the preceding claims 59 to 61, characterized in that the transverse wall, the ignition tube and the flanks that surround the plate-like part, only project on one side of said plate-like part, which side is designed to be coupled to the shorter side of the burner end, whereas the opposite side of the plate-like part is completely flat and rests on the longer side of the burner end which forms a fastening base or extension.

63. A burner as claimed in one or more of the preceding claims, characterized in that the plate-like part has at least two through holes whose axes are perpendicular to the surface subtended by said part and which open, at least on the side opposite to the ignition tube, into a slot or transverse recess, whereas the burner end wall surfaces that are to overlap said sides of the plate-like part of the flame arc forming head have complementary and coincident ridges.

64. A burner as claimed in one or more of the preceding claims 59 to 63, characterized in that both walls of the burner end, which are designed to overlap the faces of the plate-like part, or one of these walls, have positioning ribs to delimit a surface which substantially corresponds to the surface covered by the plate-like part, with respect to its mounted condition.

65. A burner as claimed in one or more of the preceding claims, characterized in that the outer face

of each of the two half shells that form the burner body and the venturi tube has, at each side edge, a longitudinal groove, to form, for each half shell, a pair of inner longitudinal recesses, that are designed to convey and evenly distribute the gas/air mixture, and that start from the venturi tube area and end at a predetermined distance from the flame arc forming head carrying end.

66. A burner as claimed in claim 65, characterized in that the two longitudinal recesses of one half shell are aligned with the two longitudinal recesses of the opposite half shell respectively..

67. A burner as claimed in claim 65 or 66, characterized in that each longitudinal recess has such a depth that it is in contact with the corresponding recess of the opposite half shell, at least partly, in the venturi tube section whereas, in the burner section, the two longitudinal recesses of at least one of the two half shells have such a depth that their apices extend at a predetermined distance from the apices of their respective recesses of the opposite shell, so as to form a pair of lateral longitudinal slots, for conveying the gas/air mixture in a direction transverse to the flow direction.

68. A burner as claimed in one or more of the preceding claims, characterized in that the longitudinal recesses in mutual contact in the funnel-like end section of the venturi tube are situated at least partly inside the burner body and separate, from said end section of the venturi tube, side compartments

which extend the burner body toward the venturi tube, which outer side walls also have supply holes and communicate with the inside of the burner body.

69. A burner as claimed in one or more of the preceding claims, characterized in that even the tubular body end opposite to the flame arc forming head has a truncated profile, and the venturi tube is provided as a separate body, which is fitted on said end.

70. A burner as claimed in claim 69, characterized in that the venturi tube is inserted in the burner up to abutment of the end edge of said truncated end against an end-of-stroke step which is formed on the outer surface of the venturi tube.

71. A burner as claimed in claim 69 or 70, characterized in that it comprises means for locking the venturi tube in the inserted condition.

72. A burner as claimed in claim 71, characterized in that said means consist of at least one, but preferably at least two inner ridges, particularly circular bosses, which are provided in the proximity of the end of each half shell, and are engaged in a pair of corresponding slots provided on each facing surface of the part of the venturi tube that is situated inside the tubular burner body.

73. A burner as claimed in one or more of the preceding claims, characterized in that the venturi tube is connected to the tubular burner body through an interposed tubular joint, particularly made of a die cast material.

74. A burner as claimed in claim 73, characterized in that said tubular joint is rectilinear so that, in the assembled condition, the venturi tube extends substantially coaxially to the tubular burner body.

75. A burner as claimed in claim 73, characterized in that said tubular joint has a curved shape so that, in the assembled condition, the venturi tube extends transverse to the tubular burner body.

76. A burner as claimed in one or more of the preceding claims, characterized in that it has means for coupling it to a mounting for supporting in a predetermined position a flame detector thermocouple and/or a burner igniter.

77. A burner as claimed in claim 76, characterized in that these coupling means are such that mutual contact and/or engagement surfaces of the burner and the mounting are oriented in at least three non-parallel planes, and have such rotation preventing means that the position of the mounting is accurately and uniquely defined.

78. A burner as claimed in one or more of the preceding claims, characterized in that the burner end with the flame arc forming head is provided by shaping the truncated ends of two half shells of the burner.

79. A burner as claimed in claim 78, characterized in that the two half shells are shaped in such a manner as to form a flattened end (202, 201), which ends by two perpendicular spaced end tabs, at whose interstice at least one, preferably two gas

inflow grooves are formed by shaping the flattened portion of one or both half shells whereas, sideways, a half shell forms perpendicular side tabs oriented toward the second half shell, the latter forming sealing folds at least over a portion of such perpendicular tabs.

80. A burner as claimed in claim 79, characterized in that the flattened portions of the two half shells have, in coincident positions, at least one riveting bush and a hole for insertion of said bush respectively.

81. A burner as claimed in claim 80, characterized in that it has a fastening base, which is a separate part and is provided with a plate-like fastening extension with a pair of riveting tabs designed to engage in the holes of the flattened burner portion with the flame arc forming head and with a hole wherein a riveting bush of the burner's flattened portion is engaged.

82. A burner as claimed in claim 81, characterized in that it has an ignition tube element with a fastening plate which is designed to be interposed between the plate-like fastening extension of the base and with apertures for the passage of side riveting tabs of the plate-like fastening extension of the base.

83. A burner as claimed in one or more of the preceding claims, characterized in that it has opposite side flanges over at least one portion of its length, the ignition tube having a transverse fastening plate

whose length corresponds to the length of the burner with such side flanges, there being provided, at opposite ends of said transverse ignition tube fastening plate, at least two riveting tabs around such two side flanges of the burner.

84. A burner as claimed in one or more of the preceding claims, characterized in that it has opposite side flanges over at least one portion of its length, there being provided a mounting for supporting a flame detector and/or an ignition electrode, which has a transverse fastening plate whose length corresponds to the length of the burner with such side flanges, there being provided, at opposite ends of said transverse ignition tube fastening plate, at least two riveting tabs around such two side flanges of the burner.

85. A burner as claimed in claim 84, characterized in that the tabs form, at least at one end of the plate, a C-shaped engagement groove for the corresponding side flange, whereas at the opposite end the tabs only provide lateral containment, and there being provided removable means which form a wedge-like locking engagement of the corresponding side flange of the burner.

86. A burner as claimed in claim 85, characterized in that said wedge-like locking means consist of an inclined extension which projects beyond the corresponding side flange of the burner and has a locking screw in a threaded hole.

87. A venturi tube for an oven or grill burner, comprising a tubular body which has at least one

funnel-shaped section which tapers toward a gas/air mixture supplying nozzle, which section has, in a substantially intermediate portion, at least an aperture for the intake of the primary combustion air, and further comprises a tubular sleeve that can slide in the direction of the axis of the venturi tube between a position in which the intake aperture is substantially completely closed and a position in which it is substantially completely open, to adjust the stoichiometric gas/air ratio, said sleeve being provided with position locking means, characterized in that the venturi tube is composed of two half shells.

88. A venturi tube as claimed in claim 87, characterized in that, when the burner is fitted onto the bottom or top wall of the oven, the separator plane between the two half shells is substantially parallel to the bottom or top wall of the oven.

89. A venturi tube as claimed in claim 87 or 88, characterized in that it is symmetrical, at least in the tapering section, with respect both to the separation/junction plane between the two half shells and to the means for locking the gas/air stoichiometric ratio adjustment sleeve, so that these locking means, when the burner is fitted on the bottom or top wall of the oven, are always situated on the accessible side.

90. A venturi tube as claimed in one or more of claims 87 to 89, characterized in that it extends coaxially to the tubular burner body, or is oriented transversely to the tubular burner body.

91. A venturi tube as claimed in one or more of

claims 87 to 90, characterized in that it is disposed in a staggered position with respect to the tubular burner body.

92. A venturi tube as claimed in one or more of the preceding claims 87 to 91, characterized in that it is integrated with a burner, and each of the two half shells whereof it is composed is an extension of each of the two half shells that compose the tubular burner body.

93. A venturi tube as claimed in one or more of the preceding claims 87 to 93, characterized in that it has means for coupling it to a mounting for supporting in a predetermined position a flame detector thermocouple and/or a burner igniter.

94. A venturi tube as claimed in one or more of the preceding claims 87 to 93, characterized in that these coupling means are such that mutual contact and/or engagement surfaces of the venturi tube and the mounting are oriented in at least three non-parallel planes, and have such rotation preventing means that the position of the mounting is accurately and uniquely defined.

95. A venturi tube as claimed in one or more of the preceding claims 87 to 94, characterized in that it is a separate part, and one of its ends is to be tightly fitted to an end of the tubular burner body.

96. A venturi tube as claimed in claim 95, characterized in that said coupling end consists of an end section that has such a size as to allow insertion thereof inside an end of the tubular burner body up to

end-of-stroke abutment of the end edge of the burner against a step, particularly a continuous step, that is formed on the outer surface of the venturi tube.

97. A venturi tube as claimed in claim 96, characterized in that means are provided for locking it in an inserted position inside the tubular burner body.

98. A venturi tube as claimed in claim 97, characterized in that said means consist of at least one, but preferably at least two inner ridges, particularly circular bosses, which are provided in the proximity of the end of one, but preferably both half shells whereof the burner is composed, which bosses are engaged in two pairs of corresponding slots provided on the facing surface of the part of the venturi tube that is situated inside the burner.

99. A venturi tube as claimed in one or more of the preceding claims 76 to 98, characterized in that it is provided in combination with a member for junction thereof to the tubular burner body, particularly a tubular joint made of a die cast material.

100. A venturi tube as claimed in claim 99, characterized in that said tubular joint has a substantially rectilinear shape so that the venturi tube is coaxial to the tubular burner body, or a curved shape, so that the venturi tube is transverse thereto.

101. A venturi tube as claimed in one or more of the preceding claims 77 to 100, characterized in that, at one of its ends, it has a chamber with an opening for connection to a union, that may be inserted to size, in a tight manner, inside an aperture formed at

an end of the burner, particularly an end of one of the two half shells that compose the tubular burner body.

102. A venturi tube as claimed in claim 101, characterized in that said union extends perpendicular to the junction planes between the half shells of the venturi tube and the half shells of the burner body, whereby said junction planes are parallel to each other.

103. A venturi tube as claimed in claim 102, characterized in that the sealing effect is obtained by mechanical deformation, i.e. by flanging/riveting the union on the peripheral edge wall of the aperture, before joining together the two half shells of the burner body.

104. A mounting for supporting in a predetermined position a flame detector thermocouple and/or a burner igniter, comprising means for coupling it to the burner body and/or to the venturi tube body, characterized in that said coupling means are such that mutual contact and/or engagement surfaces are oriented in at least three non-parallel planes, and have means for preventing mounting rotation, so that the position thereof is accurately defined

105. A mounting as claimed in claim 104, characterized in that such means are provided for preventive coupling thereon of the thermocouple and/or the igniter that the position of the latter is uniquely defined both with respect to the mounting and, when the mounting is fitted on the burner and/or the venturi tube, with respect to the gas/air mixture outlet holes.

106. A mounting as claimed in claim 104 or 105, characterized in that, at one end, it is profiled as a U-shaped arm, on a side wall whereof one, but preferably two holes are provided, each being coaxial to a corresponding hole formed on the opposite wall, each pair of coaxial holes being designed for axial introduction of the igniter and/or thermocouple respectively.

107. A mounting as claimed in claim 106, characterized in that means are provided for locking the thermocouple and/or the igniter in an inserted position inside the respective pair of holes.

108. A mounting as claimed in claim 107, characterized in that said means consist of at least one elastic member, e.g. a clip, tingle or the like respectively for the thermocouple and the igniter.

109. A mounting as claimed in one or more of the preceding claims 104 to 108, characterized in that the U-shaped arm has an extension for connection thereof to the burner body.

110. A mounting as claimed in claim 109, characterized in that said extension is an end extension of the base side of the U-shaped arm, which consists of a plate-like member, whose end is perforated to allow the passage of the parabolic reflector centering and fastening bolt close to the end of the burner body associated to the venturi tube, the plate being clamped above and against said parabolic reflector at the same time as the latter is clamped against the outer face of the half shell of the burner

body which carries said bolt.

111. A mounting as claimed in claim 110, characterized in that each of the two side edges of the end with the fastening hole extends transversely by a tab that is oriented in the direction of the burner body in such a manner as to form a bridge-like end, particularly having a trapezoid cross section, which overlaps, through a pair of apertures formed in the parabolic reflector, two longitudinal grooves formed on the outer face of the half shell of the burner body that carries the bolts, in such a manner as to prevent rotation of the mounting.

112. A mounting as claimed in one or more of the preceding claims 104 to 111, characterized in that it has a first section oriented opposite the gas/air mixture inflow direction, a second curved section, and a third section, substantially corresponding to the channel-shaped section, which is oriented in the inflow direction, particularly substantially through 45°.

113. A mounting as claimed in one or more of the preceding claims, characterized in that the burner connection extension consists of a plate for extension of the open side of the U-shaped arm, which plate has a U-bent edge, for insertion of a free peripheral edge of an outer tab of the burner and/or the venturi tube, whereas the opposite edge has at least one, but preferably two U-bent tabs on the same side of the U-bent edge, which form two teeth to be fitted in two corresponding holes formed in the outer tab of the burner body and/or the venturi tube.

114. A mounting as claimed in claim 113, characterized in that the plate has, in a substantially intermediate position between the two bent edges, a step whose front is turned toward the U-bent edge and that, when the plate is fitted thereon, causes an elastic deformation of the outer tab of the venturi tube for further retaining the mounting in position.

115. A mounting as claimed in claim 113 or 114, characterized in that, when it is fitted on the burner body and/or the venturi tube body, the U-shaped arm section is oriented in the gas/air mixture inflow direction and forms an angle of about 45° with said direction.

116. A mounting for supporting at least one flame detector and/or ignition electrode, characterized in that it includes a transverse fastening plate, whose length corresponds to the total width of the burner, including a side flange provided on both sides of the burner over at least a predetermined partial length thereof, and that said fastening plate has stable fastening means by elastic deformation and/or removable by fastening thereof to each of said two side flanges of the burner.

117. A process for fabricating an oven or grill burner as claimed in one or more of the preceding claims 1 to 87 and having a venturi tube, whose gas/air mixture supply axis does not coincide with the burner axis, as claimed in one or more of claims 87 to 103, characterized in that it includes the steps of:

- Forming an upper and a lower half shells by cutting

a metal sheet and by bending, drawing and trimming its edges.

- Making a hole at an end of a face of the lower half shell.
- Fitting the lower half shell onto the venturi tube, by inserting the sleeve of the venturi tube in the hole and by pressing the sleeve around the edge of the hole.
- Forming gas/air mixture outlet holes on the two half shells.
- Cramping the two half shells to form the burner body while forming the pilot burner.
- Welding the parabolic reflector fastening bolts on the upper half shell.
- Closing an end of the burner body by pressing together the free and truncated ends of the two half shells.
- Deforming said flattened end to create a burner fastening base.
- Positioning the parabolic reflector on the upper half shell.
- Positioning the mounting for the igniter and the thermocouple on the upper half shell.
- Securing the parabolic reflector and the mounting.

118. A process as claimed in claim 117, characterized in that it further includes the step of forming an aperture on the surface of the parabolic reflector, and downwardly bending the edge of said aperture to form an ignition tube.

119. A process for fabricating an oven or grill burner as claimed in one or more of the preceding claims 1 to 87 and having a venturi tube, whose gas/air mixture supply axis coincides with the burner axis, characterized in that it includes the steps of:

- Making an upper half shell with an integrated half shell at one of its ends, to form a part of a venturi tube, and a lower half shell with an integrated half shell at one of its ends, to form the other part of the venturi tube, by cutting a metal sheet and bending, drawing and trimming its edges.
- Cramping the two half shells to form the burner body while forming the pilot burner and the venturi tube.
- Tightly locking an end closing and/or flame arc forming head member at the truncated end of the burner body, by clutching and mechanical compression deformation.
- Forming gas/air mixture outlet holes on the two half shells.
- Welding the parabolic reflector fastening bolts on the upper half shell.
- Deforming an extension of the truncated end wall of one of the two half shells to create a burner fastening base.
- Positioning the parabolic reflector on the upper half shell.
- Positioning the mounting for the igniter and the thermocouple on the upper half shell.

- Securing the parabolic reflector and the mounting.

120. A process for fabricating an oven or grill burner as claimed in one or more of the preceding claims 1 to 87 and having a venturi tube, whose gas/air mixture supply axis coincides with or is on the same axis as the burner axis, characterized in that it includes the steps of:

- Forming an upper and a lower half shells by cutting a metal sheet and by bending, drawing and trimming its edges.
- Cramping the two half shells to form the burner body while forming the pilot burner, in such a manner as to form a tubular burner body that is truncated at both ends.
- Tightly locking an end closing and/or flame arc forming head member at the truncated end of the burner body, by clutching and mechanical compression deformation.
- Tightly locking a rectilinear or curved joint at the opposite truncated end of the burner body, by clutching and mechanical compression deformation.
- Forming gas/air mixture outlet holes on the two half shells.
- Welding the parabolic reflector fastening bolts on the upper half shell.
- Deforming an extension of the truncated end wall of one of the two half shells to create a burner fastening base.
- Positioning the parabolic reflector on the upper

half shell.

- Positioning the mounting for the igniter and the thermocouple on the upper half shell.
- Securing the parabolic reflector and the mounting.

121. A process for fabricating an oven or grill burner as claimed in one or more of the preceding claims 1 to 87 and having a venturi tube, whose gas/air mixture supply axis coincides with or is on the same axis as the burner axis, characterized in that it includes the steps of:

Forming an upper and a lower half shells by cutting a metal sheet and by bending, drawing and trimming its edges.

Cramping the two half shells to form the burner body while forming the pilot burner and a flame arc forming head terminal at one end, the opposite end having a truncated profile.

Tightly locking a rectilinear or curved joint at the truncated end opposite to the flame arc forming head, by clutching and mechanical compression deformation.

Forming gas/air mixture outlet holes on the two half shells.

Welding the parabolic reflector fastening bolts on the upper half shell.

Deforming an extension of the truncated end wall of one of the two half shells to create a burner fastening base.

Positioning the parabolic reflector on the upper half shell.

Positioning the mounting for the igniter and the thermocouple on the upper half shell.

Securing the parabolic reflector and the mounting.

122. A process for fabricating an oven or grill burner as claimed in one or more of the preceding claims 1 to 87 and having a venturi tube, whose gas/air mixture supply axis does not coincide with or is not on the same axis as the burner axis, characterized in that it includes the steps of:

Forming an upper and a lower half shells by cutting a metal sheet and by bending, drawing and trimming its edges.

Making a hole at an end of a face of the lower half shell.

Fitting the lower half shell onto the venturi tube, by inserting the sleeve of the venturi tube in the hole and by pressing the sleeve around the edge of the hole.

Cramping the two half shells to form the burner body while forming the pilot burner, in such a manner as to form a tubular burner body that is truncated at both ends, the closing members being a flame arc forming head or a separate closing member, that are pressed on one or both ends of the tubular member or tightly fitted on at least one of the two ends.

Forming gas/air mixture outlet holes on the two half shells.

Welding the parabolic reflector fastening

bolts on the upper half shell.

Deforming an extension of the truncated end wall of one of the two half shells to create a burner fastening base.

Positioning the parabolic reflector on the upper half shell.

Positioning the mounting for the igniter and the thermocouple on the upper half shell.

Securing the parabolic reflector and the mounting.

123. A process for fabricating an oven or grill burner as claimed in one or more of the preceding claims 1 to 87 and having a venturi tube, whose gas/air mixture supply axis coincides with or is on the same axis as the burner axis, characterized in that it includes the steps of:

Making an upper half shell with an integrated half shell at one of its ends, to form a part of a venturi tube, and a lower half shell with an integrated half shell at one of its ends, to form the other part of the venturi tube, by cutting a metal sheet and bending, drawing and trimming its edges.

Cramping the two half shells to form the burner body while forming the pilot burner and the venturi tube.

Forming gas/air mixture outlet holes on the two half shells.

Sealing the truncated tubular body end opposite to the venturi tube by pressing together the two half shells along a predetermined end section.

Welding the parabolic reflector fastening bolts on the upper half shell.

Deforming an extension of the truncated end wall of at least one of the two half shells to create a burner fastening base.

Positioning the parabolic reflector on the upper half shell.

Positioning the mounting for the igniter and the thermocouple on the upper half shell.

Securing the parabolic reflector and the mounting.

124. Process as claimed in claim 123, characterized in that, instead of providing an integrated venturi tube, a tubular body is provided, that is truncated at both ends, the venturi tube being secured to one of these ends by clutching and tight fitting the tubular body directly at the end of the venturi tube or indirectly onto a junction element which is in turn sealed to the end of the venturi tube.